

## Paper 2

### Derivatives Investment Consultant Examination

Thailand Securities Institute

July 2012

## Paper 2: Derivatives Investment Consultant Examination

Examination type: Multiple choice (4 choices)

Number of questions: 120

Duration: 3 hours

Passing criteria: 70% overall, including 70% from Module 2

| Topics   | No. of Questions |
|--|------------------|
| <b><u>Section 1 Fundamental</u></b>  | <b><u>35</u></b> |
| 1.1 Financial System and Structure of Financial Markets  | 3                |
| 1.2 International Financial Markets  | 2                |
| 1.3 Risk and Return from Single Asset Investment   | 10               |
| 1.4 Information for Decision-making in Financial Markets   | 5                |
| 1.5 Security Analyses  | 5                |
| 1.6 Portfolio Management   | 7                |
| 1.7 Overview of Derivatives and Its Market   | 3                |
| <b><u>Section 2 Core Rules and Regulations and Investment Suitability</u></b>                            | <b><u>25</u></b> |
| 2.1 Rules Governing Conducting Securities Business and Operations of Officers                            | 7                |
| 2.2 Regulations Relating to Unfair Actions in Securities Trading and Protection against Money Laundering | 3                |
| 2.3 Rules and Regulations on Issuing and Offering Securities   | 5                |
| 2.4 Investment Suitability   | 10               |
| <b><u>Section 3 Products Knowledge and Rules and Regulations for Dealing in Derivatives</u></b>          | <b><u>60</u></b> |
| <b><u>3.1 Derivatives</u></b>  | <b><u>45</u></b> |
| 3.1.1 Derivatives: Fundamental Concepts and Knowledge  | 4                |
| 3.1.2 Futures Market   | 6                |
| 3.1.3 Futures  | 25               |
| 3.1.4 Options  | 7                |
| 3.1.5 Swap   | 3                |

| Topics  | No. of Questions    |
|---|---------------------|
| <a href="#">3.2 Rules and Regulations for Dealing in Securities (Including Derivatives)</a> | <a href="#">15</a>  |
| 3.2.1 Thailand Futures Exchange (TFEX) Rules and Regulations                                | 5                   |
| 3.2.2 Thailand Clearing House (TCH ): Settlement and Clearing Rules                         | 5                   |
| 3.2.3 Derivatives Act and Related Laws  | 5                   |
|   | <a href="#">120</a> |

**Paper 2: Derivatives Investment Consultant Examination**  
**Section 1 Fundamental**

---

**1. Financial System and Structure of Financial Markets**

**Learning Objective Statement:**

1. To understand the importance of and be able to describe characteristics of invested capital
2. To understand how capital is transferred from savers (investors) to borrowers (businesses)
3. To understand the roles and functions of financial systems
4. To understand the functions of organizations responsible for financial systems
5. To understand the supervision and regulations of financial systems
6. To understand characteristics of financial market structures
7. To understand different types of investors and the investment preferences of each type
8. To describe the characteristics of different types of financial assets (securities in the capital market) and understand the relationship between financial assets and capital markets

**2. International Financial Markets**

**Learning Objective Statement:**

1. To understand the roles, functions, and importance of international financial markets and how funds flow across countries
2. To understand characteristics and roles of an international financial market
3. To understand direct and indirect investment in international financial markets including both bond and stock markets and understand risk and return from investing through international financial markets
4. To explain how international financial markets impact domestic financial markets and economic systems

**3. Risk and Return from Single Asset Investment**

**Learning Objective Statement:**

1. To understand how to evaluate the return when investing in a security
2. To calculate total and net return from a security investment

3. To understand how to calculate holding period return, historic return, expected rate of return, marginal return, rate of return from short selling, and compound rate of return
4. To understand how to calculate required rate of return, risk-free rate of return, and real risk-free rate of return
5. To understand and be able to differentiate between various types of risk premiums including inflation premium
6. To calculate rate of return in each period from treasury bills, corporate bonds and other types of bonds
7. To calculate rate of return in each period from dividends, rights for current shareholders from dividend reinvestment plans, and stock splits
8. To calculate expected rates of return and historic returns, using both arithmetic and geometric mean methods
9. To be able to compare arithmetic mean returns vs. geometric mean returns
10. To calculate the rate of return from margin calls, rate of return from short sales, and compounded rate of return
11. To calculate after-tax return, required rate of return, risk-free rate of return in dollar terms, and real risk-free rate of return
12. To understand risks of investing in securities
13. To understand various types of risk from investment, whether from macro-economic or micro-economic factors
14. To understand how to measure risk from expected rate of return and from historic returns
15. To measure risk from security investment by calculating variance, standard deviation, and coefficient of variation
16. To understand problems in using standard deviation to measure risk
17. To apply coefficient of variation, or CV, for decision-making in securities
18. To understand systematic and unsystematic risk
19. To differentiate between systematic and unsystematic risk
20. To understand measuring systematic risk using the coefficient beta
21. To understand how to calculate beta

#### **4. Information for Decision-making in Financial Markets**

##### **Learning Objective Statement:**

1. To understand the definition and importance of information related to investment decisions

2. To understand how efficient markets function and be able to classify markets into one of three forms according to the efficient market hypothesis.
3. To understand disclosed information, inside information, anomalies, and inequality of information.
4. To understand how to collect, categorize, and process information in financial statements analysis

## 5. Security Analyses

### Learning Objective Statement:

1. To understand the definition, types, and differences between fundamental and technical analysis
2. To understand the overall picture and process in analyzing a security using fundamental analysis
3. To understand the principles of macro-economics, economic life-cycle, economic indicators and tools when analyzing the economy and economic policy
4. To understand the differences between monetary and fiscal policy
5. To analyze global and domestic economy systems to forecast the impact of macro-economic factors on different industries (or sectors).
6. To understand the principles of economic cycles, economic expansion, classification of industries (or sectors) and how macro-economic structural change could influence changes in industry
7. To understand how to analyze competitiveness in industries using the Five Force model and to explain and forecast how the impact on the industry could influence companies in that industry
8. To understand how to analyze a company, types of company, and various types of securities
9. To categorize company information into qualitative and quantitative data
10. To analyze qualitative and quantitative data that related to security investment
11. To apply SWOT analysis when analyzing securities for investment
12. To understand low-cost and differentiation strategies for security investment analysis
13. To understand components of financial statements, types of financial statements, and other reports to stockholders and other investors which represent a company's financial position and performance.

14. To analyze and evaluate a company's financial position and its performance for investment decisions on a company's security using tools such as trend, common size, and financial ratio analysis
15. To understand definitions, principles, hypotheses, theories and tools, and to understand the limitations in using technical analysis.

## **6. Portfolio Management**

### **Learning Objective Statement**

1. To explain the necessity and advantages of portfolio investment
2. To understand the definition of portfolio investment and the concept of diversifying asset classes
3. To understand factors and limitations that could influence or impact changes in investment behavior and the impact on diversification of such changes
4. To understand processes in managing portfolio investment and the importance of allocating invested capital
5. To understand the necessity of disclosing portfolio investment policy and information that will be used for setting investment policy
6. To understand the principles of portfolio management
7. To understand and be able to describe the concepts of risk and return for portfolios
8. To calculate the expected return for portfolios
9. To know and be able to measure risks of investing in portfolios by calculating variance, standard deviation, and coefficient of variation
10. To describe how the correlation coefficient of securities could influence portfolio diversification
11. To evaluate how adding risk-free assets into a portfolio with risky assets impacts portfolio rate of return and risk
12. To understand and be able to describe the concepts behind the Markowitz portfolio theory
13. To describe the efficient frontier and explain the significance of an investor's willingness to accept higher risk
14. To define and be able to select an efficient portfolio suitable for a given individual
15. To understand and explain the concept of market portfolios and be able to construct a capital market line (CML)
16. To understand and explain the concept and hypothesis of market theory and asset pricing models and including the capital asset pricing model (CAPM)

17. To be able to calculate the rate of return from a security using a security market line (SML) and able to use the SML in determining whether or not the security is suitable for a given investment strategy
18. To estimate beta using a characteristic line and be able to explain its definition
19. To understand and explain the concepts behind and hypothesis of arbitrage pricing theory (APT) and be able to apply APT for investment decisions
20. To explain the necessity of passive
21. To differentiate between passive and active portfolio management
22. To understand the objectives and the importance of portfolio performance measurement and portfolio performance evaluation
23. To understand the principle of portfolio performance evaluation with the Sharpe, Treynor and Jensen models
24. To evaluate portfolio performance using the Sharpe, Treynor Model, Jensen models
25. To compare the advantages and disadvantages of the Sharpe, Treynor, and Jensen models and to describe their application

## **7. Overview of Derivatives and Its Market**

### **Learning Objective Statement**

1. To understand the history and structure of the derivatives market in Thailand
2. To understand the definition of derivatives instruments and be able to classify various types of derivatives
3. To understand characteristics of derivatives markets and identify differences of each derivatives market
4. To differentiate various types of traders in derivatives markets
5. To explain the advantages of derivatives in general
6. To understand the definitions of and be able to differentiate between derivatives that are traded in the exchange vs. those that are traded over-the-counter (OTC).



## Section 2

### Core Rules and Regulations and Investment Suitability

---

#### 1. Rules Governing Conducting Securities Business and Operations of Officers

##### Learning Objective Statement:

1. To understand why the Securities and Exchange Commission regulates and supervises securities companies
2. To understand the importance of protecting against conflicts of interest and be able to identify procedures to prevent such conflicts between securities companies, their staff and clients
3. To understand and identify differences between watch lists and restricted lists
4. To understand the principles involved in taking care of client assets
5. To understand the role and importance of the compliance unit in a securities company
6. To understand the practices and regulations governing operations of officers of a securities firm and know the differences between the role of the front and back offices
7. To understand the regulations governing the taking of client complaints
8. To understand the rules and duties of securities officers and be able to apply them in contacting, persuading , and advising customers
9. To understand the purpose of customer database preparation and be able to implement such preparation
10. To understand the purpose of investor manuals and be able to identify their components
11. To describe the code of ethics that officers must follow in carrying out their duties
12. To identify the characteristics that would prohibit a person from becoming a securities officer, forbidden procedures for such an officer, and penalties for having such characteristics or carrying out such procedures
13. To understand purposes and benefits of arbitration
14. To provide clear examples of disputes that can go to arbitration
15. To understand arbitration procedures and arrival of verdicts

## 2. Regulations Relating to Unfair Actions in Securities Trading and Protection against Money Laundering

### Learning Objective Statement:

1. To understand the definition of unfair actions according to the Securities and Exchange Act and be able to apply measures to prevent any unfair actions
2. To understand and be able to distinguish the differences between spreading false news, illegally using internal information, and concealing acts in trading securities with intent to defraud
3. To understand criteria and procedures in transaction reporting for financial institutions as well as identify the basic illegal acts covered by the Anti-Money Laundering Act
4. To understand the objectives behind regulations seeking information on the parties involved in and purposes of large transactions through financial institutions, and apply these regulations

## 3. Rules and Regulations on Issuing and Offering Securities

### Learning Objective Statement:

1. To understand and explain the rules and procedures on offering securities
2. To understand and explain the rules, conditions and procedures for distributing securities
3. To understand and apply the rules and procedures for securities bidding
4. To understand the rules and criteria for setting up mutual funds and describe characteristics of each type of mutual fund
5. To understand the procedures of offering security units
6. To understand the purposes of determining investment ratios
7. To understand the key components that must be stated in project descriptions
8. To understand the purpose of preparing prospectus and be able to define key components therein
9. To understand the objectives of NAV calculation and the NAV calculation formula for disclosure to investors

## 4. Investment Suitability

### Learning Objective Statement:

1. To understand the benefits and objectives of investment planning
2. To understand the procedures of investment planning for clients
3. To understand the reasons and necessity of knowing your client before investment planning

4. To understand types of information used in investment planning
5. To understand characteristics and patterns of clients' investment objectives, such as capital protection
6. To understand factors affecting client risk tolerance levels
7. To analyse the types of investment securities relating to client financial investment goals
8. To understand the client limitations and investment conditions and analyse their impact on investment plans
9. To understand the key components in investment planning for customer
10. To understand the basic concept of investment diversification and money allocation
11. To understand the concept of selecting securities to match client risk tolerance levels as well as understand the concept of capital allocation according to the investment pyramid
12. To understand the characteristics of risk and return for various types of securities related to the level of risk tolerance of different client types
13. To analyse and advise investment securities types that are suitable for investment objective and level of risk tolerance of client

## Section 3:

### Products Knowledge and Rules and Regulations for Dealing in Derivatives

---

#### 3.1 Derivatives

##### 1. Derivatives: Fundamental Concepts and Knowledge

###### Learning Objective Statement:

1. To differentiate between derivatives and other types of financial securities.
2. To describe the benefits of derivatives
3. To differentiate between various types of derivatives such as futures and options
4. To differentiate between the derivatives, exchange-traded and over-the-counter markets (OTC)
5. To explain the roles of traders in the derivatives markets such as arbitrageurs, speculators and dealers
6. To advise different types of investors on basic investment strategy.

##### 2. Futures Market

###### Learning Objective Statement:

1. To explain the characteristics of the Agricultural Futures Exchange of Thailand (AFET) and Thailand Futures Exchange (TFEX)
2. To differentiate between futures and forward contracts
3. To explain trading, risk and return of futures contracts
4. To describe different types of futures contracts, for example, interest rate and foreign exchange futures (USD futures)
5. To explain the mechanics of trading, initial and maintenance margins, marking to market, cash and actual delivery, and cash settlement
6. To calculate margin, marking to market, and cash settlement
7. To apply futures contracts for hedging and speculation
8. To calculate futures prices both for futures of financial assets and of commodities.

##### 3. Futures

###### Learning Objective Statement:

1. To explain the concepts of derivatives pricing analysis, including arbitrage pricing theory and the law of one price
2. To explain the concepts of futures contract pricing, including price convergence and the cost of carry model

3. To calculate futures contract prices using price convergence and the cost of carry model.
4. To explain pricing concepts for different futures contracts, including financial and commodity futures
5. To calculate prices of different futures contracts, including financial futures and commodity futures.
6. To explain cost of carry and its basis
7. To calculate risk and return for different futures trading strategies, including hedging, speculation, and arbitrage.

#### **4. Options**

##### **Learning Objective Statement:**

1. To distinguish the types of options characterized by rights, exercise styles, moneyness and underlying assets
2. To distinguish between options and futures contracts
3. To calculate positions and returns of options, including long call, long put, short call, and short put
4. To make practical use of options according to investors' objectives, including hedging, increasing returns on investment, and delaying the actual trading of underlying assets
5. To calculate risk and return of options and explain factors influencing options prices
6. To explain obligations associated with options and offsetting positions
7. To make practical use of options to manage risk, increase returns on investment, or delay trading of the actual underlying asset
8. To explain the concepts of options pricing, including factors influencing intrinsic and time values.

#### **5. Other Financial Derivatives**

##### **Learning Objective Statement:**

1. To explain the types and characteristics of swaps, including interest rate, currency, and equity swaps, and swaptions.
2. To explain the concept of swap pricing;
3. To make practical use of swaps, including interest rate, currency and equity swaps
4. To explain the characteristics of caps and floors
5. To explain the characteristics of exotic derivatives, including barrier, binary, as-you-like-it, Asian, compound, and look back options.

### 3.2 Rules and Regulations for Dealing in Securities (Including Derivatives)

#### 1. Thailand Futures Exchange (TFEX) Rules and Regulations

##### Learning Objective Statement:

1. To explain the characteristics of SET 50 Index Futures;
2. To calculate multiplier, tick size and position limit;
3. To explain trading and settlement procedures for derivatives.

#### 2. Thailand Clearing House (TCH): Settlement and Clearing Rules

##### Learning Objective Statement:

1. To explain the roles of TCH;
2. To explain the risk management measures of TCH, including the qualifications of TCH members, margin requirements, margin management, financial resources, and default procedures.

#### 3. Derivatives Act and Related Laws

##### Learning Objective Statement:

1. To explain the scope of futures contracts according to the Derivatives Act;
2. To explain the objectives and supervision mechanisms of the Derivatives Act.

##### 3.1 Rules for Derivatives Business Operators

###### Learning Objective Statement:

1. To explain the rules for various derivatives business operators;
2. To explain the types of derivatives business operators, licensing, and rules for derivatives business operators in accordance with the Derivatives Act.

##### 3.2 Standard Practices of Derivatives Investor Contacts

###### Learning Objective Statement:

1. To explain standard practices of derivatives investor contacts in the derivatives business and unfair practices relevant to such contracts.

##### 3.3 Unfair Derivatives Trading Practices

###### Learning Objective Statement:

1. To explain how to prevent undesirable behavior affecting stability and reliability of capital markets, and abstain from fraudulent activities in capital markets.

\*\*\*\*\*